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May 21, 2009

Dean K. Matsuura
Manager, Regulatory Affairs
Hawaiian Electric Company, Inc.
P. O. Box 2750
Honolulu, Hawaii 96840-0001

Re: Docket No. 2008-0303, In re. Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., Maui Electric Company, Ltd. for Approval of the Advanced Metering Infrastructure (AMI) Project and Request to Commit Capital Funds, to Defer and Amortize Software Development Costs, to Begin Installation of Meters and Implement Time-of-Use Rates, for Approval of Accounting and Ratemaking Treatment and Other Matters

Dear Mr. Matsuura:

Enclosed please find information requests ("IRs") prepared by the Commission's consultant, the National Regulatory Research Institute, for the above-referenced docket. Please respond within thirty days of the date of this letter.

Please contact the undersigned if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Stacey Kawasaki Djou".

Stacey Kawasaki Djou
Commission Counsel

SKD:ps

c: Thomas W. Williams, Jr., Esq./Damon L. Schmidt, Esq.
Catherine P. Awakuni
Henry Q Curtis/Kat Brady
Warren S. Bollmeier II
Mark Duda

Initial Questions to HECO Companies

Please respond to the following questions with full and detailed narrative descriptions and, where applicable, provide all underlying calculations, workpapers, and supporting documents.

I. General Prudence

1. Please provide a comprehensive cost-benefit analysis extending over the life of the project and incorporating direct and indirect costs and benefits of the AMI Project.
 - a. What are the expected total costs and benefits of the AMI Project through at least 2035? Please extend the tables on pages 9 and 10 of Exhibit 19 and on page 7 of Exhibit 22 outward to at least 2035.
 - b. Please quantify indirect benefits associated with the AMI Project, such as avoided capacity builds and reduced dispatch of peaking generators. What assumptions are included (e.g., mandatory TOU rates for certain customer classes)?
 - c. If the response to the questions above does not indicate that total benefits exceed total costs, please provide additional reasons why the Commission should approve this Application.
2. To what extent does allowing customer choice regarding TOU rates mitigate the potential benefits of the AMI Project? Specifically, might there be self-selection of customers who already primarily consume power in off-peak times into the TOU rate program and what would be the consequences of such a dynamic? Have pilot projects in Hawaii or elsewhere explored this issue and, if so, what conclusions did they make?
3. Beyond their potential to reduce peak demand, what are the anticipated economic, reliability, and environmental benefits of TOU rates? Please provide estimates of the scale of such benefits.
4. How might the AMI Project affect the integration of intermittent renewable resources, such as wind and solar generation? Specifically, would enhanced reliability benefits of AMI facilitate the integration of additional renewable energy resources? If so, please quantify how much additional intermittent resources are likely to be facilitated by the AMI Project.

II. Technology and implementation

1. According to Exhibit 18, the HECO Companies propose beginning development of the MDMS System and the basic CIS and RNI integration in Q1, 2010. The TGB Network deployment is projected to begin in Q4,

2010 and additional CIS and RNI integration would begin in Q1, 2011. Advanced meter deployment would start in Q2, 2011. Additionally, according to page 1 of Exhibit 19, advanced meter deployment is scheduled to take place for HECO from 2011 to 2013, for MECO during 2014, and for HELCO during 2015. Based on this development and deployment schedule:

- a. Please explain how the proposed implementation schedule is optimal when considering all issues, including in part, the book value remaining on replaced meters, labor cost, and operational savings?
 - b. What is the rationale for first installing meters in the HECO service territory, followed by the MECO service territory and the HELCO service territory? How does this affect the proposed recovery of book value of replaced meters described on page 5 of Exhibit 24 of the Application?
 - c. Please provide an analysis of whether the benefits and costs of AMI differ by customer class or location. Does the current installation schedule consider prioritizing customers for whom the relative cost and benefits of advanced meters are most favorable?
 - d. Would it be possible to begin deployment of advanced meters prior to 2011 in order to receive operational benefits sooner? If not, what operational or procurement issues impede a faster deployment?
 - e. If possible, how might faster deployment of advanced meters affect the need for accelerated depreciation of both replaced meters and advanced meters?
 - f. If deployment of advanced meters began in 2010, what is the scope of benefits likely received during 2010 and 2011?
2. According to page 4 of the filing, "[t]he AMI project will replace approximately 95-96% of commercial, industrial, and residential meters with AMI meters." Why does the AMI Project not replace 100% of existing meters for each of the HECO Companies?
 3. What effect does the AMI program have on the HECO Companies' work force? Please quantify the total employee headcount reduction that will take place annually and upon the completion of the AMI project.

III. Cost Recovery

1. According to page 1 of Exhibit 24 of the Application, the HECO Companies propose to recover the costs of new AMI meters over seven years. Please provide precedents from the FERC or other state commissions demonstrating that seven years is a just and reasonable recovery period? Please consider recent findings by the California PUC and the Emergency Economic Stabilization Act of October 3, 2008.¹ Also provide a full and detailed narrative explanation demonstrating that seven years is a just and reasonable depreciation period for the costs of new AMI meters.
2. On page 5 of Exhibit 24 of the Application, the HECO Companies propose to recover the remaining book value of existing meters over three years for HECO and over the period of time between the Commission's Decision and Order and the start of meter installation for MECO and HELCO.
 - a. Please provide precedents from the FERC or other state commissions demonstrating that three years is a just and reasonable recovery period? Please consider the PUC Staff comments in the ongoing Case No. IPC-E-08-16 before the Idaho PUC.² Also provide a full and detailed narrative explanation demonstrating that three years is a just and reasonable recovery period.
 - b. On what grounds is it just and reasonable for the existing meters for MECO, HELCO and potentially HECO to be fully depreciated using accelerated depreciation *before*, rather than *as* or *after* the advanced meters are installed?
3. On page 8 of Exhibit 24 of the Application, the HECO Companies propose to defer certain software development costs associated with the MDMS, accumulate AFUDC on the deferred costs, amortize the deferred costs over 12 years, and include the unamortized costs in rate base. Based on this proposal:
 - a. Should software development costs be deferred and amortized, expensed immediately, or expensed with the cost recovery spread over multiple years? How have software development costs been treated by other state commissions and the FERC?

¹ http://docs.cpuc.ca.gov/published/FINAL_DECISION/58362-07.htm

² <http://www.puc.state.id.us/search/orders/dtsearch.html>

- b. Is 12 years a just and reasonable amortization period for software development costs? Over what period have software development costs been amortized in the past by the Hawaii PUC, other state commissions, and the FERC? Also provide a full and detailed narrative explanation demonstrating that 12 years is a just and reasonable depreciation period for software development costs.
- 4. On page 12 of Exhibit 24 of the Application, the HECO Companies describe that the agreement with Sensus to operate and maintain the AMI network constitutes a lease. The HECO Companies then request the Commission to provide assured rate recovery over the 15-year term of this agreement. Has the Commission provided similar treatment to other leases that the HECO Companies engage in? If not, why is this particular lease agreement meriting of assured cost recovery? How has lease recovery of this kind been treated by other state commissions and the FERC?
- 5. On page 14 of Exhibit 24 of the Application, the HECO Companies propose "for ratemaking purposes... to include the lease expense in revenue requirements for the AMI Surcharge, but to exclude the imputed debt and annual rebalancing costs for purposes of calculating the AMI Surcharge revenue requirements." With respect to this request:
 - a. Why should imputed debt and rebalancing cost be included in the lease revenue requirement but excluded from the AMI Surcharge revenue requirement calculations? How have these items been treated in the past by the Hawaii PUC, other state commissions, and the FERC?
 - b. Does omitting the imputed debt and rebalancing costs for purposes of calculating the AMI surcharge revenue requirement affect the debt/equity ratio and overall rate of return, and if so, to what extent?
 - c. Does this treatment of imputed debt and rebalancing costs affect the overall revenue requirement compared to including them in the AMI Surcharge revenue requirement, and if so, to what extent?
- 6. On page 8 of Exhibit 22 of the Application, the HECO Companies propose to utilize a capital structure that is 3% short term debt, 36% long term debt, 7% preferred stock, and 54% common stock. It proposes to use rates of 6% for short term debt, 6.5% for long term debt, 8% for preferred stock, and 12% for common stock. With respect to this proposal:
 - a. Is the proposed capital structure consistent with that proposed in the HECO Companies' most recent general rate case? If not, what accounts for or justifies the difference?

- b. Are the proposed rates for short term debt, long term debt, preferred stock, and common stock consistent with those proposed in the HECO Companies' most recent general rate case? If not, what accounts for or justifies the difference?
 - c. Should the return used to calculate the surcharge be less than the overall return authorized by the Commission in the last rate case to reflect certainty of recovery and earlier recovery than under base rate treatment?
- 7. To what extent would undertaking the AMI Project without the REIP Surcharge or a similar alternative adversely affect the HECO Companies? If undertaking this project in the absence of such a cost recovery mechanism occurs, how much would it likely decrease the HECO Companies' credit rating and increase the cost of capital for this project and for other capital projects?
- 8. Is the use of the proposed TOU rates expected to have any overall revenue effect? Is the aggregate amount of power consumed expected to change and, if so, by how much? Is the aggregate cost of electric generation expected to change, presumably due to shifting load patterns and changing dispatch? Please quantify such effects.
- 9. Are AMI Meters expected to reduce overall energy consumption? If so, please explain how they would reduce overall energy consumption and quantify the amount as well as the aggregate ratepayer savings.